

LOW POWER CONSUMPTION ADAPTIVE POWER AMPLIFIER

ABSTRACT OF THE DISCLOSURE

A power amplification circuit (10) includes a scalable power amplifier (20) to produce an RF output signal (50) at an output of the power amplification circuit (10), and a variable impedance circuit (30) coupled to the output of the power amplification circuit (10). The scalable power amplifier (20) includes a plurality of selectively activated amplifier elements (22), (24), (26) to produce the RF output signal (50) in accordance with a desired RF output signal power level. The power amplification circuit (10) selectively activates individual amplifier elements by, for example reducing power or increasing power to at least one amplifier element. The variable impedance circuit (30) varies an impedance of the variable impedance circuit (30) to dynamically load the output of the scalable power amplifier(20).